### **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 09/638,693ASource:  $|F\omega|/6$ Date Processed by STIC: 2/4/05

# ENTERED



#### IFW16

PATENT APPLICATION: US/09/638,693A DATE: 02/04/2005
TIME: 16:30:31

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\02042005\I638693A.raw

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5 <110 > APPLICANT: Innogenetics N.V.
      9 <120> TITLE OF INVENTION: New sequences of hepatitis C virus genotypes for diagnosis,
prophylaxis
     10
              and therapy
     13 <130> FILE REFERENCE: 35
C--> 17 <140> CURRENT APPLICATION NUMBER: US/09/638,693A
C--> 17 <141> CURRENT FILING DATE: 2000-08-15
     17 <160> NUMBER OF SEQ ID NOS: 284
     21 <170> SOFTWARE: PatentIn version 3.1
     25 <210> SEQ ID NO: 1
     27 <211> LENGTH: 213
     29 <212> TYPE: DNA
     31 <213> ORGANISM: hepatitis C virus
     35 <400> SEQUENCE: 1
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     38 tategeeget geegtgeeag tggagttetg cetaceaget teggeaacae aateaettge
                                                                              120
                                                                              180
     40 tacatcaagg ccacagegge tgcaagggee geaggeetee ggaaceegga etttettgte
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     42 tgcggagatg atctggtcgt ggtggctgag agt
     45 <210> SEQ ID NO: 2
     47 <211> LENGTH: 71
     49 <212> TYPE: PRT
     51 <213> ORGANISM: hepatitis C virus
     55 <400> SEQUENCE: 2
     57 Leu Thr Glu Arg Leu Tyr Cys Gly Gly Pro Met Phe Asn Ser Lys Gly
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     61 Ala Gln Cys Gly Tyr Arg Arg Cys Arg Ala Ser Gly Val Leu Pro Thr
                    20
                                        25
     65 Ser Phe Gly Asn Thr Ile Thr Cys Tyr Ile Lys Ala Thr Ala Ala Ala
                                    40
     69 Arg Ala Ala Gly Leu Arg Asn Pro Asp Phe Leu Val Cys Gly Asp Asp
     70
     73 Leu Val Val Val Ala Glu Ser
     74 65
     77 <210> SEQ ID NO: 3
     79 <211> LENGTH: 213
     81 <212> TYPE: DNA
     83 <213> ORGANISM: hepatitis C virus
     87 <400> SEQUENCE: 3
     88 ctcacggaac ggctttactg cgggggccct atgttcaaca gcaagggggc ccagtgtggt
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     90 tatcgccgct gccgtgccag tggagttctg cctaccagct tcggcaacac aatcacttgc
                                                                              120
                                                                              180
     92 tacatcaagg ccacagcggc tgcaagggcc gcaggcctcc ggaacccgga ctttcttgtc
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     94 tgcggagatg atctggtcgt ggtggctgag agt
     97 <210> SEQ ID NO: 4
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99 <211> LENGTH: 71

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\02042005\1638693A.raw

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103 <213> ORGANISM: hepatitis C virus
107 <400> SEQUENCE: 4
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113 Ala Gln Cys Gly Tyr Arg Arg Cys Arg Ala Ser Gly Val Leu Pro Thr
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114
                20
                                    25
117 Ser Phe Gly Asn Thr Ile Thr Cys Tyr Ile Lys Ala Thr Ala Ala Ala
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121 Lys Ala Ala Gly Leu Arg Asn Pro Asp Phe Leu Val Cys Gly Asp Asp
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125 Leu Val Val Val Ala Glu Ser
126 65
129 <210> SEQ ID NO: 5
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142 tatcgccgtt gccgtgccag tggagttctg cctaccagct tcggcaacac aatcacttgt
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144 tacatcaaag ccacagegge egcaaaagce geaggeetee ggageeegga etttettgte
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151 <211> LENGTH: 71
153 <212> TYPE: PRT
155 <213> ORGANISM: hepatitis C virus
159 <400> SEQUENCE: 6
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165 Ala Gln Cys Gly Tyr Arg Arg Cys Arg Ala Ser Gly Val Leu Pro Thr
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169 Ser Phe Gly Asn Thr Ile Thr Cys Tyr Ile Lys Ala Thr Ala Ala Ala
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173 Lys Ala Ala Gly Leu Arg Ser Pro Asp Phe Leu Val Cys Gly Asp Asp
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177 Leu Val Val Ala Glu Ser
178 65
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181 <210> SEQ ID NO: 7
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185 <212> TYPE: DNA
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194 tatcgccgtt gccgtgccag tggagttctg cctaccagct tcggcaacac aatcacttgt
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196 tacatcaaaq ccacaqcqqc cqcaaaaqcc gcaggcctcc ggagcccgga ctttcttgtc
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201 <210> SEQ ID NO: 8
203 <211> LENGTH: 71
205 <212> TYPE: PRT
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Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\02042005\1638693A.raw

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Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\02042005\I638693A.raw

216																	
	<400							_	_								
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321	Ala	Gln	Cys	Gly	Tyr	Arg	Arg	Cys	Arg	Ala	Ser	Gly	Val	Leu	Pro	Thr	
322				20					25					30			
325	Ser	Phe	Gly	Asn	Thr	Ile	Thr	Cys	Tyr	Ile	Lys	Ala	Thr	Ala	Ala	Ala	
326			35					40	-		•		45				
	Lys	Ala	Ala	Glv	Leu	Ara	Asn	Pro	Asp	Phe	Leu	Val	Cvs	Glv	Asp	Asp	
330	-1-	50		1		5	55					60	-1-	1		F	
	Leu		Val	Val	Δla	Glu											
334		Vul	var	V 44 1	mu	70	DCI										
	<210	- CI	70 TI	רא כ	. 12	, 0											
	<211																
					±⊥												
	<212				1												
	<213				_	atit:	LS C	vir	us								
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	_		_					-								ccttga	60
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358	gaco	ccag	gtg a	acaco	ctaca	ag to	ggcag	gtcag	g gta	acgto	gga	gcaa	accad	ccg (	cttc	gatacg	360
360	cagg	cat	gta ç	gacat	tgtt	gg to	gggc	gegge	c cad	gate	gtgc	tctg	gctci	cct a	acgt	gggtga	420
362	tatg	tgt	ggg g	gccgt	tctt	cc to	gtg	ggaca	a ago	cctt	cacg	ttca	agaco	ctc	gtcg	ccatca	480
364	aacq	gtc	cag a	acct	gtaad	ct go	ctcac	ctgta	a cc	cagge	ccat	cttt	cago	gac a	accga	aatggc	540
366	_	-	_	_	_	_		_						_	_		
	Ļ																541
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Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\02042005\1638693A.raw

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425 His Arg Met Ala	
426 180	
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442 agacgggata aatttegeaa cagggaattt geeeggttge teetttteta tetteettee	
444 tgctctgttc tcttgcttaa tccatccagc agctagtcta gagtggcgga acacgtctgg	
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452 caggeatgta gacatattgg tgggegegge cacaatgtge tetgetetet acgtgggtga	
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478 20 25 30	
481 Cys Ser Phe Ser Ile Phe Leu Pro Ala Leu Phe Ser Cys Leu Ile His	
482 35 40 45	
485 Pro Ala Ala Ser Leu Glu Trp Arg Asn Thr Ser Gly Leu Tyr Val Leu	
486 50 55 60.	
489 Thr Asn Asp Cys Ser Asn Ser Ser Ile Val Tyr Glu Ala Asp Asp Val	
490 65 70 75 80 493 Ile Leu His Thr Pro Gly Cys Val Pro Cys Val Gln Asp Gly Asn Thr	
493 THE LEG HIS THE PRO GLY CYS VAL PRO CYS VAL GIR ASP GLY ASH THE 494 85 90 95	
497 Ser Ala Cys Trp Thr Pro Val Thr Pro Thr Val Ala Val Arg Tyr Val	
498 100 105 110	
501 Gly Ala Thr Thr Ala Ser Ile Arg Arg His Val Asp Ile Leu Val Gly	
502 115 120 125	
502 115 120 125 505 Ala Ala Thr Met Cys Ser Ala Leu Tyr Val Gly Asp Met Cys Gly Ala	
505 Ala Ala Thr Met Cys Ser Ala Leu Tyr Val Gly Asp Met Cys Gly Ala	
505 Ala Ala Thr Met Cys Ser Ala Leu Tyr Val Gly Asp Met Cys Gly Ala 506	
505 Ala Ala Thr Met Cys Ser Ala Leu Tyr Val Gly Asp Met Cys Gly Ala 506	
505 Ala Ala Thr Met Cys Ser Ala Leu Tyr Val Gly Asp Met Cys Gly Ala 506	

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\02042005\1638693A.raw

#### Please Note:

Seq#:55; N Pos. 191

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seg#:56; Xaa Pos. 64
Seq#:57; N Pos. 185,191,276
Seq#:58; Xaa Pos. 62,64,92
Seq#:59; N Pos. 38,76,79,151,232,349
Seq#:60; Xaa Pos. 13,26,27,51,78,117
Seq#:61; N Pos. 38,70,174,339
Seq#:62; Xaa Pos. 13,24,58,113
Seq#:165; N Pos. 306,313,340
Seq#:166; Xaa Pos. 102,105,114
Seq#:179; N Pos. 568,569,570,571,572,573,574,575,576,577,578,579
Seq#:180; Xaa Pos. 24,190,191,192,193
Seq#:181; N Pos. 152
Seq#:182; Xaa Pos. 51
Seq#:197; N Pos. 787,1011,1444
Seq#:198; Xaa Pos. 263,337,482
Seq#:199; N Pos. 684,909,1058,1133
Seq#:200; Xaa Pos. 228,303,353,378
Seg#:209; N Pos. 13,23,65,72,277,337
Seg#:210; Xaa Pos. 8,22,24
Seq#:211; N Pos. 11,327,333,334,340
Seq#:212; Xaa Pos. 4,109,111
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#### Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,124,125,141 Seq#:142

## VERIFICATION SUMMARY PATENT APPLICATION: US/09/638,693A DATE: 02/04/2005 TIME: 16:30:32

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\02042005\1638693A.raw

```
L:17 M:270 C: Current Application Number differs, Replaced Current Application No
L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:2300 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:180
L:2341 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:48
L:2408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:180
M:341 Repeated in SeqNo=57
L:2469 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58 after pos.:48
M:341 Repeated in SeqNo=58
L:2564 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59 after pos.:0
M:341 Repeated in SeqNo=59
L:2639 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:0
M:341 Repeated in SeqNo=60
L:2722 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:0
M:341 Repeated in SeqNo=61
L:2787 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:0
M:341 Repeated in SeqNo=62
L:5642 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:165 after pos.:300
L:5717 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:166 after pos.:96
M:341 Repeated in SeqNo=166
L:6340 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:179 after pos.:540
L:6379 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:180 after pos.:16
M:341 Repeated in SeqNo=180
L:6452 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:181 after pos.:120
L:6503 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:182 after pos.:48
L:7234 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:197 after pos.:780
M:341 Repeated in SeqNo=197
L:7365 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:198 after pos.:256
M:341 Repeated in SeqNo=198
L:7498 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:199 after pos.:660
M:341 Repeated in SeqNo=199
L:7635 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:200 after pos.:224
M:341 Repeated in SeqNo=200
L:8046 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:209 after pos.:0
M:341 Repeated in SeqNo=209
L:8101 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:210 after pos.:0
M:341 Repeated in SeqNo=210
L:8184 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:211 after pos.:0
M:341 Repeated in SeqNo=211
L:8239 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:212 after pos.:0
M:341 Repeated in SeqNo=212
```